

WHAT IS CLAIMED IS:

1. An image pickup unit comprising:
- an image pickup medium;
 - an optical system through which an image of an object is formed on said image pick medium;
 - a reflecting member which is disposed at a position on a side of the object nearer than that of said optical system, and which reflects light from the object so that the light is made incident on said optical system;
 - reflecting member drive means which drives said reflecting member;
 - an interface for enabling communication with an apparatus main body, the apparatus main body (i) having therein said image pickup unit and (ii) generating a signal to control an operation of said image pickup unit; and
 - a microcomputer which transmits information on a side of the image pickup unit to said apparatus main body and controls said reflecting member drive means on the basis of the signal received from said apparatus main body,
 - said reflecting member drive means which drives said reflecting member to change an orientation of an image pickup field of said image pickup medium.

2. A unit according to Claim 1, further comprising

00694507 102400

a stop which is disposed on the object side of said optical system.

3. A unit according to Claim 1, further comprising a stop which is disposed in said optical system, wherein an image through said stop is formed at a position on the side of the object nearer than that of said stop at a negative magnification, by a portion comprising the optical system.

4. A unit according to Claim 3, wherein the portion comprising the optical system at the position on the side of the object nearer than that of said stop comprises, on a surface of a transparent body, (i) an optical element having an incident refracting surface, (ii) an emitting refracting surface, and (iii) a plurality of reflecting surfaces to which light incident in said transparent body from said incident refracting surface is repetitively reflected and is emitted from said emitting refracting surface.

5. A unit according to Claim 1, wherein said optical system comprises, on a surface of a transparent body, an optical device having (i) an incident refracting surface, (ii) an emitting refracting surface, and

09694507 102400

(iii) a plurality of reflecting surfaces to which light incident in said transparent body from said incident refracting surface is repetitively reflected and is emitted from said emitting refracting surface.

6. A unit according to Claim 1, wherein said optical system has a plurality of optical components, and further comprising a driver which changes relative positions of said plurality of optical components, to perform zooming.

7. A unit according to Claim 6, further comprising zooming drive means which drives at least one optical component so as to change the relative positions of said plurality of optical components, and wherein said microcomputer controls said zooming drive means on the basis of the signal from said apparatus main body.

8. A unit according to Claim 1, further comprising a driver which moves at least one part of the optical components comprising said optical system to perform focusing.

9. A unit according to Claim 1, further comprising a drive which moves said image pickup medium to perform

004207 054507 102400

focusing.

10. A unit according to Claim 1, further comprising:
distance measuring means which measures a distance to
the object to be photographed; and

focusing drive means which drives a focusing operation,
and wherein said microcomputer controls said focusing drive
means on the basis of a result measured by said distance
measuring means.

11. A unit according to Claim 1, further comprising:
in-focus detecting means which detects an in-focus
state of the object to be photographed; and

focusing drive means which drives a focusing operation,
and wherein said microcomputer controls said focusing drive
means on the basis of a result detected by said in-focus
detecting means.

12. A unit according to Claim 1, further comprising:
light measuring means which measures a brightness of
the object to be photographed; and

exposure correcting means which corrects an exposure of
said image pickup medium, and wherein said microcomputer
controls said exposure correcting means on the basis of a
result detected by said light measuring means.

004207 20546960

13. A unit according to Claim 1, further comprising image processing means which processes image data so that the image photographed by said image pickup medium becomes an erect image, irrespective of an orientation of said image pickup field.

14. A unit according to Claim 1, further comprising image pickup medium rotating means for rotating said image pickup medium in accordance with an orientation change in said image pickup field.

15. An apparatus comprising an image pickup unit comprising a unit according to Claim 1.

16. An image pickup unit comprising:
an image pickup medium;
an optical system through which an image of an object is formed on said image pick medium;

a reflecting member which is disposed in said optical system, and to which light from the object incident through a portion comprising said optical system and disposed on a side of the object nearer than that of said reflecting member is reflected and is made incident to said portion;

a driver which drives said reflecting member and said

004297 102400 09694507

portion to change an orientation of an image pickup field of said image pickup medium;

reflecting member drive means which drives said reflecting member;

an interface which provides communication with an apparatus main body, said apparatus main body (i) having therein said image pickup unit and (ii) generating a signal to control an operation thereof; and

a microcomputer which (i) transmits information on the side of the image pickup unit to said apparatus main body and (ii) controls said reflecting member drive means on the basis of the signal received from said apparatus main body.

17. A unit according to Claim 16, wherein said optical system comprises a stop near the reflecting member.

18. An apparatus comprising an image pickup unit according to Claim 16.

004201 2054560